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The first book to provide a comprehensive survey of the emerging field of language data processing (by "language" is meant a natural language such as English or Russian, and not an artificial language such as ALGOL, FORTRAN, or MAD). It not only covers all aspects of the computer processing of natural-language data, but also gives extensive background material in linguistics, mathematics and computation. (63840)

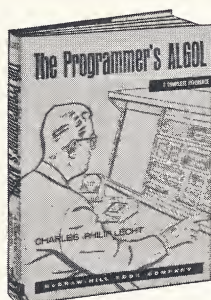
INTRODUCTION TO DYNAMIC PROGRAMMING. By George L. Nemhauser.

A volume of unique value to those concerned with optimization problems. Analyzes in order elementary and complex systems; emphasizes when to use dynamic programming and how to do the computations; provides numerous flow charts and exercises. (56470)

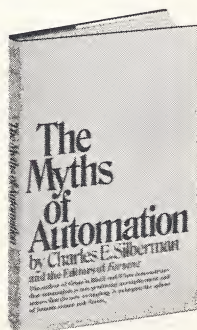
INTEGRATED DATA PROCESSING SYSTEMS. By E. Jerome McCarthy and J. A. McCarthy.

Edited by Durward Humes. A comprehensive, jargon-free book "aimed at those who want to understand in *depth* how data processing machines can help analyze business information. It is well organized, highly readable."—Elias M. Awad, *De Paul University* (55660)

THE PROGRAMMER'S ALGOL. By Charles Philip Lecht. A complete reference book on the most widely known and used international computer language. Carefully and clearly analyzes ALGOL, surveys techniques, and describes sample programs. (70720)



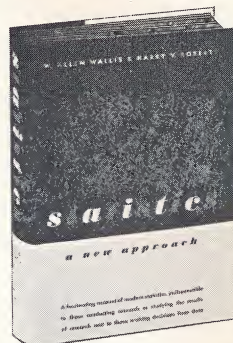
THE MYTHS OF AUTOMATION. By Charles E. Silberman. The "machine" is *not* taking over. So argues Charles Silberman in this brilliant illustration of how the new technology is enlarging the sphere of human choice and action. "Kills the automation myths . . . should have a wide audience."—*The New York Times* (63330)



MAN'S PLACE IN THE DYBOSPHERE. By Richard R. Landers. A vivid portrayal of our "brave new world"—where machines perform human functions and humans grow more machinelike. What will happen to society, government, and our very culture as machines become more and more dominant? Richard Landers, senior scientist with Thompson Ramo Wooldridge, Inc., gives some exciting answers. (60360)

COMPUTER MODELING AND SIMULATION. By Francis F. Martin. Brilliant introduction to how and when this powerful new technique can be used. Indispensable for computer programmers, systems analysts, operations analysts, and business analysts, plus mathematicians and statisticians. (39990)

MATHEMATICAL DIVERSIONS. By J. A. H. Hunter and Joseph S. Madachy. Offers a wide range of diverting mathematical problems on an extraordinary assortment of topics: number relations and properties, simple paradoxes, magic squares, topological problems with paper and string, Diophantine equations, geometric dissections, the ham-sandwich theorem, chess puzzles, and a host of others. (61060)



STATISTICS: A NEW APPROACH. By W. Allen Wallis and Harry V. Roberts. The most highly regarded book on the subject—a comprehensive analysis of statistical reasoning and the methods of statistics. Stresses the basic unity of statistical methods. "One of the most penetrating analyses of statistics ever published."—*Edward A. Huth*. (80530)

BASIC MATRIX ALGEBRA AND TRANSISTOR CIRCUITS. By G. Zelinger. Breaks down matrix theory into its all-important fundamentals, including basic matrix algebra, four-terminal network theory, transistor models, and related design applications. The author is with the Canadian Marconi Company. (35520)

A COMPARATIVE STUDY OF PROGRAMMING LANGUAGES. By *Bryan Higman*. Au-

thoritative discussion of the features of each of the programming languages available, together with an incisive analysis of their structure and function. Indispensable for readers who want more than a mere working knowledge of programming languages. (39780)

THE IMPACT OF COMPUTERS ON MANAGEMENT. Edited By *Charles A. Myers*.

Presents the latest thinking and research on the relationship between man and machine and the roles of both in industrial organization, stressing the implications of computers for managerial work. Based on a conference of experts at the Alfred P. Sloan School of Management of Massachusetts Institute of Technology. (55140)

DIGITAL COMPUTER SYSTEM PRINCIPLES. By *Herbert Hellerman*. Unified over-

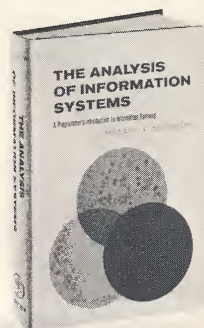
view of the *principles* of digital computer systems, many of which are common to programming, machine design, and problem description. Provides an in-depth look at the field, one that is sure to result in a new understanding of the computer as a system. (42170)

COMBINATORIAL THEORY. By *Marshall*

Hall, Jr. The definitive work in combinatorial mathematics. A systematic analysis of the discrete in mathematics and science, this volume—like the author's earlier works—is certain to become a classic. (39610)

THE COMPUTER SAMPLER. Edited by *Wil-*

liam F. Boore and Jerry R. Murphy. New thinking on the computer as a management tool. Articles from more than 20 diverse management and computer publications provide a thorough understanding of the opportunities for and problems of using computers in business. (40010)



THE ANALYSIS OF INFORMATION SYSTEMS. By *Charles T. Meadow*. A careful

study of the languages of information retrieval, the organization of records and files, and the machine processing of stored information. Supplies the background needed for participation in the analysis and design of information-handling systems and for understanding the literature in the field. (33400)

TECHNOLOGY AND CHANGE. By *Donald A.*

Schon. Sophisticated work in simple language on how business firms succeed or fail to use new inventions and innovations. Challenges businessmen's widely-held assumptions about change and suggests remedies for the failure of management to find and profit from new technologies. (82680)

PROGRAMMING: An Introduction to Computer Language and Techniques. By *Ward*

Douglas Maurer. Remarkably lucid presentation of the basic techniques of programming in an algebraic language and in machine language. Concepts are defined in terms of their application to specific computers in current use. (70710)

ELEMENTS OF ABSTRACT ALGEBRA. By Richard A. Dean. A delightful, fascinating introduction to abstract algebra, focusing on those concepts that are significant in all mathematics. Superb presentation of the challenging branch of modern mathematics whose foundations lie in the theory of groups.

(44360)

AN INTRODUCTION TO THE THEORY OF SETS. By Joseph Breuer. Cogently introduces the "most encompassing idea of modern mathematics"—set theory. Ranges from finite sets through point sets to intriguing paradoxes in the field. The *only* book in English on the subject for the non-specialist.

(56420)

DIGITAL TAPE DRIVES. By James E. Taunt. For computer programmers, analysts, managers, and consultants—a non-technical explanation of the inner workings of digital tape drives. An unusually clear picture of this "beast of burden," especially useful if you must investigate an unknown computer system or increase the efficiency of an existing computer system.

(42260)

INTRODUCTION TO ALGORITHMIC METHODS USING THE MAD LANGUAGE. By Alan B. Marcovitz and Earl J. Schweppe. A handbook written specifically to introduce methods applicable to the implementation of algorithms on computing machines. Utilizes the MAD (Michigan Algorithmic Decoder) Language developed at University of Michigan.

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THE BASIC DICTIONARY OF SCIENCE. Edited by E. C. Graham. Lucid definitions of more than 25,000 terms used in all branches of modern science and technology—including physics, chemistry, biology, geology, astronomy, anthropology, engineering, aeronautics, and metallurgy. Thorough and practical, this dictionary also contains 20 pages of reference aids such as periodic tables, conversion factors, and tables of weights and measures.

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CALCULATOR'S CUNNING: The Art of Quick Reasoning. By Karl Menninger. More than one hundred easily mastered and remembered arithmetical short cuts for solving problems and checking answers. Covers rapid addition and subtraction, estimating, percentages, cross-multiplication, boundary division, and squares. "Solid practical advice."—*Martin Gardner*

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A MISCELLANY OF PUZZLES. By Stephen Barr. Dozens of intriguing puzzles based on amusing, bizarre and instructive mathematical structures. "A remarkable collection of entertaining problems."—*Scientific American*

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IT ALL DEPENDS. By Harvey Sherman. Unusually *flexible* approach to the problems of organization—a wealth of useful ideas and a sharp critique of so-called "immutable" principles of good management. (Winner, McKinsey Foundation Book Award, 1966.)

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THE LIFE EXTENSION GUIDE TO BETTER HEALTH. By Harry J. Johnson, M.D. A practical, plainspoken guide to maintaining day-to-day physical vitality—plus a trenchant attack on the popular notions about how "pressure" jobs affect good health.

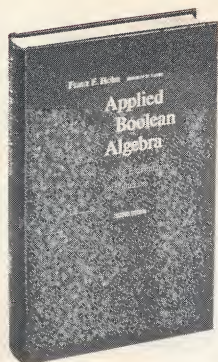
(52000)

ELEMENTS OF DATA PROCESSING MATHEMATICS. By W. T. Price and M. Miller. Mathematics, as it is applied to computer programming and data processing, is given concise and comprehensive treatment. Included are linear programming, series and iterative methods. An ideal volume for self-instruction.

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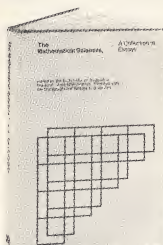
THE ENTERPRISING AMERICANS. By John Chamberlain. A lively, *honest* history of American business—from its early beginnings to today's world-wide industrial complexes. Spans the era from whaling to the legislative revolution of the New Deal.

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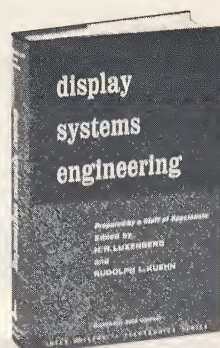


APPLIED BOOLEAN ALGEBRA. By Franz E. Hohn. An elementary and exceptionally comprehensive introduction to Boolean algebra and its applications to computer and switching circuit system design. Contains a wealth of problems, three detailed appendices, and a bibliography. A unique volume for self-instruction. (34140)

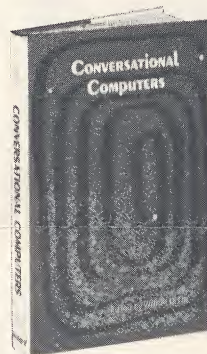
RUSSIAN-ENGLISH TRANSLATORS DICTIONARY. By Mikhail G. Zimmerman. A compendium of scientific and technical word combinations and expressions most likely to be encountered in Russian literature and journals. A reference work of unusually broad scope. (74980)



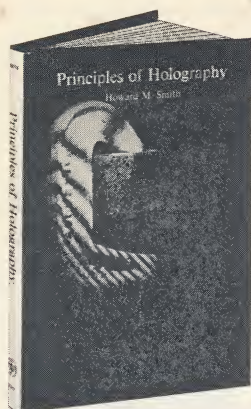
THE MATHEMATICAL SCIENCES. Edited by the National Research Council's Committee on Support of Research in the Mathematical Sciences (COSRIMS) with the collaboration of George A. W. Boehm. This long-awaited report is a landmark volume that includes twenty-one important papers by the nation's most distinguished mathematicians. The work emphasizes the ideas and concepts which are the very frontiers of twentieth-century mathematics. (34140)



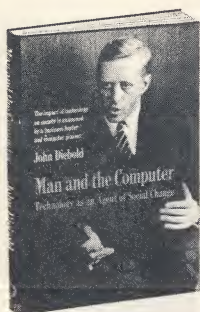
DISPLAY SYSTEMS ENGINEERING. Edited by H. R. Luxenberg and Rudolph L. Kuehn. A survey of the essential aspects of one of the newest and most exciting developments in information science—the modern display system. A volume that integrates heretofore loosely organized scientific and engineering data from a variety of sources into a modern and unified science. (42370)



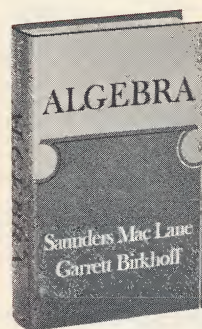
CONVERSATIONAL COMPUTERS. Edited by William D. Orr. A comprehensive review of the latest developments in time-sharing interactive computer systems and on-line problem solving. Contains important contributions by J. C. R. Licklider, John McCarthy, Vannevar Bush, and many others. (40410)



PRINCIPLES OF HOLOGRAPHY. By *Howard M. Smith*. New techniques of lensless, three-dimensional photography are given comprehensive treatment by the senior research physicist for Eastman Kodak Co. A unique work that clarifies a subject whose ultimate value to the computer and information sciences is only beginning to make itself felt, especially in the areas of information storage and display systems. (70070)

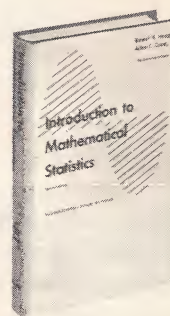


MAN AND THE COMPUTER: Technology as an Agent of Social Change. By *John Diebold*. A thorough assessment of the impact of technology and computers on our society. Using case studies of three critical problem areas—education, international affairs, and industry—the author brings into focus the challenges facing us, and indicates how computer technology may be utilized in meeting these challenges. (59650)



ALGEBRA. *Saunders MacLane and Garrett Birkhoff*. A completely new standard work by the eminent authors who revolutionized the study of algebra. Here are the new approaches, the new vocabulary indispensable for today's students. (32530)

COMPLETE RUSSIAN COURSE FOR SCIENTISTS. By *M. Berseford*. This exceptional book is designed as a course to enable students to learn to read Russian, either technical or non-technical. "A systematic presentation of unusual clarity. Obviously the product of considerable experience in this kind of special-purpose language teaching." —*Dr. Savel Kliachko, University of Arizona* (39760)



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CONCEPTS OF STATISTICAL INFERENCE. By William C. Guenther. An exhaustive treatment of statistical inference, or conclusion theory—which deals with drawing conclusions from data. Covers the collection, tabulation, summarization, and interpretation of data in any form. (40120)

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PROBABILITY THEORY AND ITS APPLICATIONS, VOLUME 1, THIRD EDITION. By William Feller. This newly revised edition of the recognized classic develops probability theory as a mathematical discipline and, at the same time, illustrates a broad variety of practical problems and the modern techniques for solving them. A self-contained introductory course. (70350)

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INTUITIVE CONCEPTS IN ELEMENTARY TOPOLOGY. By B. H. Arnold. The fascinating mathematics of topology—of Klein bottles, Moebius strips, networks and space—in a superb introduction to fundamental concepts and proofs. "Excellent . . . a beautiful volume."—*Martin Gardner* (56460)

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